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(54) Machine for producing pressure-baked food products of granular material, such as rice cakes.

(57) By designing the movable sleeve (3) which defines the moulding cavity of a machine for producing roasted grain or granular food products so, that it does not have a seat, air flows occur while opening the moulding cavity that ensure a higher production, as the moulding cavities are polluted less quickly then.

The upper die (1) is fixedly mounted and the lower die (2) is movable upwards from a low position for receiving the material (6) to be roasted.

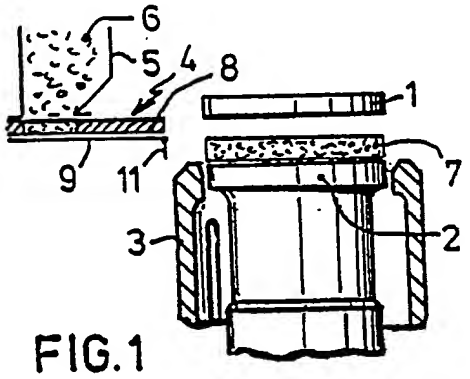

FIG.1

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(figure 5). After the lower die 2 and the sleeve 3 ar moved upwardly together, pressing begins. At a certain point the lower die 2 is suddenly moved downwards (figure 7), and roasting is effected.

The roasted food product 7 is subsequently discharged in the manner discussed in figure 1.

Figure 7 furthermore shows that the portion of the sleeve 3 that seals the moulding cavity 12 during roasting (and thus also during pressing), comprises bevelled inner edges 13 and 14 that create air flows upon opening the moulding cavity 12, which air flows blow away the remnants of the roasted or to be roasted material.

The invented machine is also quite suited for establishing the cooperation between a plurality of upper and lower dies and sleeves with one sliding means, so that a number of food products to be roasted are made in one processing cycle. In so far as new pollution or blockage problems may occur, these can easily be controlled by applying slots that can simply be cleaned from outside the machine.

The scope of the claims also extends to other embodiments than those represented in the drawing.

Claims

1. Machine for producing roasted grain or granular food products, such as rice waffles, comprising upper and lower dies that are to be heated and a sleeve, together defining at least one moulding cavity, a slide means for feeding the material that is to be roasted to the at least one moulding cavity and for discharging the roasted food product, and driving means for alternating the content of the moulding cavity between an open, a pressing and a roasting position, and for driving the slide means, **characterized in that** the upper die (1) is fixedly mounted, that the lower die (2) is movable upwards from a low position for receiving the material to be roasted (6) to the pressing position, subsequently down through the roasting position back to the low position, and in that the sleeve (3) is movable between a closing position in which it seals the moulding cavity (12) during pressing and roasting and an open position during feeding the material to be roasted and during discharging the roasted food products (7).

2. Machine according to claim 1, **characterized in that** the portion of the sleeve (3) that seals the moulding cavity (12) during pressing and roasting, comprises bevelled inner edges (13, 14).

3. Machine according to claim 1 or 2, in which the slide means comprises a slide with at least one space to be opened by means of a plate, said space being adapted to receive the material to be roasted and to transfer it to the at least one moulding cavity, **characterized in that** a flap valve (11) is mounted on the slide means (14) which flap valve acts as a discharge means for the roasted food product (7) in the position perpendicular to the slide means (4).

4. Machine according to claim 3, **characterized in that** the flap valve (11) is mounted on the plate (9).

5. Machine according to claim 3, **characterized in that** the flap valve (11) is mounted on the slide (8).

6. Machine according to one of the claims 1-5, **characterized in that** a plurality of upper and lower dies (1, 2) and pertaining sleeves (3) cooperate with one slide means (4).

7. Machine as represented in the drawing and/or discussed on the basis thereof.

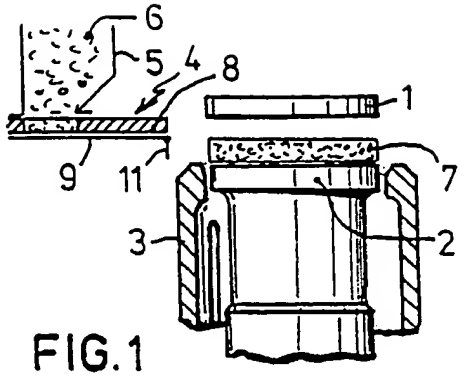

FIG.1

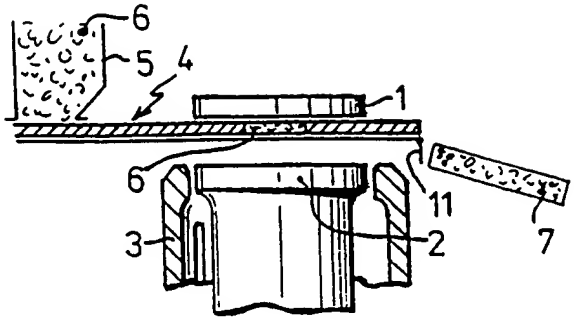

FIG.2

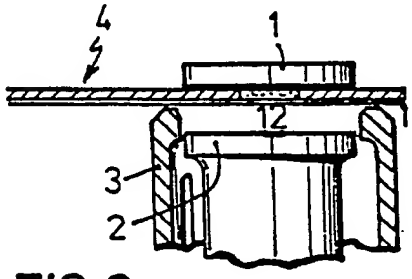

FIG.3

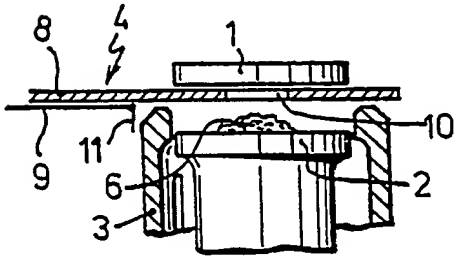

FIG.4

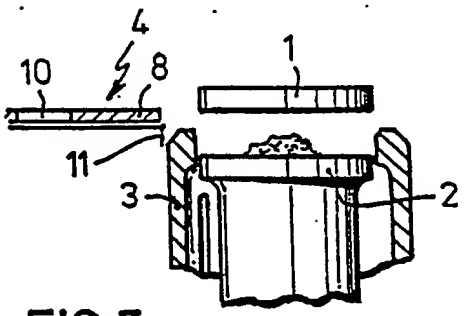

FIG.5

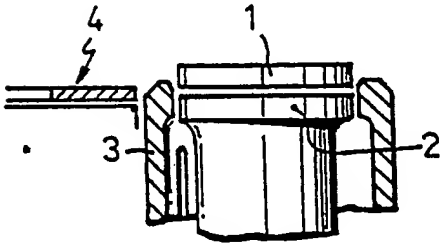

FIG.6

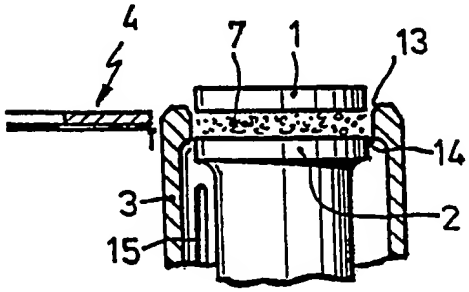

FIG.7

European Patent Office

EUROPEAN SEARCH REPORT

Application Number

EP 89 20 1403

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
P,X	WO-A-8 806 425 (R. VAN DEN BERGHE) * Claim 1; page 17, line 36 - page 21, line 7; figures 7,8a-d *	1,2,8	A 23 L 1/18 A 21 B 5/02
X	BE-A- 901 492 (M. DEKEYSER) * Claims 1-9; pages 6-9; figures 1,3,4,5,6 *	1,8	
A	BE-A- 868 361 (O. GEVAERT)		

TECHNICAL FIELDS SEARCHED (Int. Cl.4)

A 23 L
A 23 P
A 21 B
B 30 B

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	12-09-1989	DESMEDT G.R.A.

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